

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II)
OF THE PATENT COOPERATION TREATY)
(PCT Rules 44bis.3(c) and 72.2)

To:

WEICKMANN & WEICKMANN
Postfach 860 820
81635 München
ALLEMAGNE

18. MAI 2006

Frist:

Date of mailing (day/month/year)
11 May 2006 (11.05.2006)

Applicant's or agent's file reference
30024P WO

IMPORTANT NOTIFICATION

International application No.
PCT/EP2004/006180

International filing date (day/month/year)
08 June 2004 (08.06.2004)

Applicant

GNOTHIS HOLDING AG et al

1. Transmittal of the translation to the applicant.



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

None

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Yolaine Cussac

Facsimile No.+41 22 740 14 35

Facsimile No.+41 22 338 70 80

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 30024P WO	FOR FURTHER ACTION		See item 4 below
International application No. PCT/EP2004/006180	International filing date (<i>day/month/year</i>) 08 June 2004 (08.06.2004)	Priority date (<i>day/month/year</i>) 11 June 2003 (11.06.2003)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant GNOTHIS HOLDING AG			

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 8 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Box No. I | Basis of the report |
| <input checked="" type="checkbox"/> Box No. II | Priority |
| <input type="checkbox"/> Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> Box No. VI | Certain documents cited |
| <input type="checkbox"/> Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

Date of issuance of this report 01 May 2006 (01.05.2006)	
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Yolaine Cussac
Facsimile No. +41 22 740 14 35	Telephone No. +41 22 338 70 80

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference 30024P WO		Date of mailing (day/month/year)	
International application No. PCT/EP2004/006180	International filing date (day/month/year) 08.06.2004	Priority date (day/month/year) 11.06.2003	
International Patent Classification (IPC) or both national classification and IPC			
Applicant EVOTEC TECHNOLOGIES GMBH			

<p>1. This opinion contains indications relating to the following items:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; text-align: center; padding: 2px;"><input checked="" type="checkbox"/></td> <td style="width: 85%; padding: 2px;">Box No. I Basis of the opinion</td> </tr> <tr> <td style="text-align: center; padding: 2px;"><input checked="" type="checkbox"/></td> <td style="padding: 2px;">Box No. II Priority</td> </tr> <tr> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="padding: 2px;">Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="padding: 2px;">Box No. IV Lack of unity of invention</td> </tr> <tr> <td style="text-align: center; padding: 2px;"><input checked="" type="checkbox"/></td> <td style="padding: 2px;">Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="padding: 2px;">Box No. VI Certain documents cited</td> </tr> <tr> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="padding: 2px;">Box No. VII Certain defects in the international application</td> </tr> <tr> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="padding: 2px;">Box No. VIII Certain observations on the international application</td> </tr> </table>		<input checked="" type="checkbox"/>	Box No. I Basis of the opinion	<input checked="" type="checkbox"/>	Box No. II Priority	<input type="checkbox"/>	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI Certain documents cited	<input type="checkbox"/>	Box No. VII Certain defects in the international application	<input type="checkbox"/>	Box No. VIII Certain observations on the international application
<input checked="" type="checkbox"/>	Box No. I Basis of the opinion																
<input checked="" type="checkbox"/>	Box No. II Priority																
<input type="checkbox"/>	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability																
<input type="checkbox"/>	Box No. IV Lack of unity of invention																
<input checked="" type="checkbox"/>	Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement																
<input type="checkbox"/>	Box No. VI Certain documents cited																
<input type="checkbox"/>	Box No. VII Certain defects in the international application																
<input type="checkbox"/>	Box No. VIII Certain observations on the international application																
<p>2. FURTHER ACTION</p> <p>If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.</p> <p>If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.</p> <p>For further options, see Form PCT/ISA/220.</p>																	
<p>3. For further details, see notes to Form PCT/ISA/220.</p>																	

Name and mailing address of the ISA/EP	Authorized officer
Facsimile No.	Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/EP2004/006180

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
 a sequence listing
 table(s) related to the sequence listing
 - b. format of material
 in written format
 in computer readable form
 - c. time of filing/furnishing
 contained in the international application as filed.
 filed together with the international application in computer readable form.
 furnished subsequently to this Authority for the purposes of search.
3. In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/EP2004/006180

Box No. II Priority

1. The following document has not yet been furnished:
 copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).
 translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).
Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date in the claimed priority date.
2. This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/EP2004/006180

Box No. V Reasoned statement under Rule 43bis.I(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	9, 14, 18-20	YES
	Claims	1-8, 10-13, 15-17, 21-23	NO
Inventive step (IS)	Claims	9	YES
	Claims	1-8, 10-23	NO
Industrial applicability (IA)	Claims	1-23	YES
	Claims		NO

2. Citations and explanations:

Reference is made to the following document D1:

D1: BioTechniques, Volume 22, 1997, pages 1140-1145, (Rudert W.A. et al.).

1. NOVELTY

Claims 1-8, 10-13, 15-17 and 21-23 do not meet the requirements of PCT Article 33(2), for the following reasons:

- 1.1 D1 discloses a double-labeled fluorescent oligonucleotide probe which has all of the features of present **claim 1** (see abstract and fig. 5, in particular lines 5-6 in the legend of fig. 5). The subject matter of this claim is therefore not novel under PCT Article 33(2).
- 1.2 Dependent **claims 2-8 and 10-12** are also not novel because the additional features of these claims have likewise been disclosed by D1 (see legend of fig. 5).
- 1.3 D1 also discloses uses with all of the features of

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY		International application No. PCT/EP2004/006180
Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	
	<p>present claims 13 and 15-17 (see abstract and figs. 3-5).</p> <p>1.4 D1 discloses detection methods with all of the features of present claims 21-23 (see abstract and figs. 3-5).</p> <p>2. INVENTIVE STEP</p> <p>Present claims 14 and 18-20 do not appear to involve an inventive step under PCT Article 33(3), for the following reasons:</p> <p>2.1 In view of the lack of clarity mentioned under point 4.1, present claim 14 does not contain any technical feature that might substantiate the presence of an inventive step in this claim.</p> <p>2.2 The additional features of claims 18-20 are obvious standard modifications routinely used by a person skilled in the art and can therefore not be considered inventive.</p> <p>2.3 Present claim 9, however, appears to involve an inventive step, for the following reasons:</p> <p>The subject matter of present claim 9 differs from the double-labeled fluorescent oligonucleotide probe of document D1 which is considered closest prior art in that the two fluorescent labels M and M' are identical. This difference enables the fluorescent oligonucleotide probe labeled in this</p>	

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY		International application No. PCT/EP2004/006180
Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	
<p>way to be detected with higher sensitivity. The technical problem addressed by claim 9 can therefore be considered that of providing an improved oligonucleotide probe which can be detected with greater sensitivity. Since the available prior art does not appear to give any indication of the double labeling of oligonucleotide probes with two identical fluorescent labels, claim 9 appears to involve an inventive step (PCT Article 33(3)).</p> <p>3. INDUSTRIAL APPLICABILITY</p> <p>3.1 The subject matter of claims 1-23 appears to be industrially applicable and consequently meets the requirements of PCT Article 33(4).</p> <p>4. FURTHER OBSERVATIONS</p> <p>4.1 Claim 14 does not meet the requirements of PCT Article 6 because the subject matter for which protection is sought is not clearly defined. The claim attempts to define the subject matter in terms of the result to be achieved ("concentration of the analyte to be detected...$\leq 10^{-9}$ M"), but in doing so merely states the problem to be solved without providing the technical features necessary for achieving this result.</p> <p>4.2 The applicant is invited to furnish modifications in the form of replacement sheets, to clearly indicate therein the amendments made and to state</p>		

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/EP2004/006180

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

those passages of the originally filed application on which these amendments are based (PCT Article 34(2) (b), last sentence; PCT Rule 66.8). Without this information, the amendments furnished need not be taken into account for the purposes of the international preliminary examination.